

WHAT IS CLAIMED IS:

1. An ice cream base formulation comprising:
 - a) from about 35% to about 45% by weight of heavy cream;
 - b) from about 37% to 45% by weight of water;
 - c) from about 5% to about 7% by weight of polydextrose;
 - d) from about 5% to about 9% by weight of glycerin;
 - e) from about 0.7% to about 1.5% by weight of maltodextrin soluble fiber
 - f) from about 0.6% to about 1% by weight of whey protein concentrate;
 - g) from about 0.4% to about 0.7% by weight of microcrystalline cellulose gel;
 - h) from about 0.1% to about 0.2% by weight of xanthan gum;
 - i) from about 0.1% to about 0.2% by weight of lecithin;
 - j) from about 0.1% to about 0.2% by weight of a mixture of locust bean gum and carrageenan gum;
 - k) from about 1% to about 2% by weight of egg yolks;
 - l) from about 0.15% to about 0.5% of a mixture of mono- and di-glycerides of short chain fatty acids; and
 - m) an artificial sweetener comprising sucralose and acesulfame potassium in a weight ratio of about 1:2.
2. An ice cream base formulation in accordance with Claim 1, wherein said whey protein concentrate contains between about 70% and 85% by weight whey protein.
3. An ice cream base formulation in accordance with Claim 1, wherein the heavy cream contains at least about 40% butterfat.
4. An ice cream base formulation in accordance with Claim 1, wherein said formulation contains:
 - a) about 41% by weight of heavy cream; and
 - b) about 41% by weight of water.

5. An ice cream base formulation in accordance with Claim 1, wherein said formulation contains:

- c) about 6% by weight of polydextrose;
- d) about 7% by weight of glycerin;
- e) about 1% by weight of maltodextrin soluble fiber;
- f) about 0.85% by weight of whey protein concentrate;
- g) about 0.55% by weight of microcrystalline cellulose gel;
- h) about 0.15% by weight of xanthan gum;
- i) about 0.15% by weight of lecithin;
- j) about 0.15% by weight of a mixture of locust bean gum and carrageenan gum;
- k) about 1.2% by weight of egg yolks;
- l) about 0.3% by weight of said mixture of mono- and di-glycerides of short chain fatty acids; and
- l) from about 0.03% to about 0.06% by weight of said artificial sweetener

6. An ice cream base formulation in accordance with Claim 5, wherein said formulation contains about 0.05% by weight of said artificial sweetener

7. A low carbohydrate ice cream comprising the ice cream base formulation of Claim 1 and a suitable flavor.

8. A low carbohydrate ice cream formulation in accordance with Claim 7, wherein said ice cream contains from about 1.5% to about 10% by weight of said flavor, based on the total weight of said base formulation.

9. A low carbohydrate ice cream comprising the ice cream base formulation of Claim 2 and a suitable flavor.

10. A low carbohydrate ice cream formulation in accordance with Claim 9, wherein said ice cream contains from about 1.5% to about 10% by weight of said flavor, based on the total weight of said base formulation.
11. A low carbohydrate ice cream comprising the ice cream base formulation of Claim 3 and a suitable flavor.
12. A low carbohydrate ice cream formulation in accordance with Claim 11, wherein said ice cream contains from about 1.5% to about 10% by weight of said flavor, based on the total weight of said base formulation.
13. A low carbohydrate ice cream comprising the ice cream base formulation of Claim 4 and a suitable flavor.
14. A low carbohydrate ice cream formulation in accordance with Claim 13, wherein said ice cream contains from about 1.5% to about 10% by weight of said flavor, based on the total weight of said base formulation.
15. A low carbohydrate ice cream comprising the ice cream base formulation of Claim 5 and a suitable flavor.
16. A low carbohydrate ice cream formulation in accordance with Claim 15, wherein said ice cream contains from about 1.5% to about 10% by weight of said flavor, based on the total weight of said base formulation.